



**KCP&L Greater Missouri Operations Company
Electric Generation and Emissions in 2010**

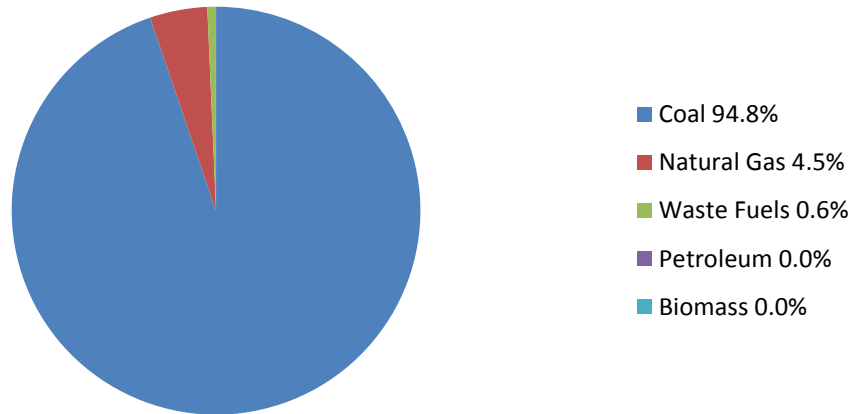
Generation Tables

	Fuel Consumption, MMBTUs	Percent of Total		Net Electric Power Generated, MWh	Percent of Total	
Non-renewable sources						
Coal	36,724,474	93.6%	93.0%	3,159,703	95.4%	94.8%
Natural Gas	2,467,923	6.3%	6.2%	151,680	4.6%	4.5%
Petroleum	49,817	0.1%	0.1%	1,281	0.0%	0.0%
Nuclear						
Other						
Non-renewable total	39,242,214	100.0%	99.4%	3,312,664	100.0%	99.4%
Renewable sources						
Biomass	7,519	2.9%	0.0%	717	3.3%	0.0%
Hydroelectric						
Landfill Gas						
Solar						
Waste Fuels	248,651	97.1%	0.6%	20,786	96.7%	0.6%
Wind						
Wood						
Renewable total	256,170	100.0%	0.6%	21,502	100.0%	0.6%
Grand total	39,498,384		100.0%	3,334,166		100.0%

Fuel Type	Physical Units	Number of Units
Anthracite Coal and Bituminous Coal	Short Tons	279,142
Sub-bituminous Coal	Short Tons	1,724,760
Natural Gas	MCf	2,393,695
Distillate Fuel Oil	Barrels	8,589
Gaseous Propane	MCf	28,385
Agricultural Crop Byproducts	Short Tons	482
Tire-derived Fuels	Short Tons	9,767



Net Generation by Fuel Type, 2010 for KCP&L Greater Missouri Operations Company





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Power Plant Nameplate information for KCP&L Greater Missouri Operations Company

Plant Name	County Location	Nameplate Capacity (MW)
<i>KCP&L Greater Missouri Operations Company</i>		6,025.2
Nevada	Vernon	88.0
Ralph Green	Cass	296.0
Sibley	Jackson	2,096.0
Lake Road	Buchanan	1,093.2
Greenwood	Jackson	976.0
Kansas City International	Platte	72.0
South Harper	Cass	1,404.0



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Emissions from Electricity Generated in 2010: KCP&L Greater Missouri Operations
Company

	CO2 Equivalent (TONS)	Carbon Dioxide (CO2) (TONS)	Methane (CH4) (TONS)	Nitrogen Dioxide (NO2) (TONS)
<i>KCP&L Greater Missouri Operations Company</i>	<i>136,886,088</i>	<i>16,321,663</i>	<i>1,828,562</i>	<i>265,047</i>
Greenwood	239,273	112,775	2,272	254
Lake Road	28,049,697	3,485,628	373,434	53,942
Nevada	1,986	452	18	4
Ralph Green	5,409	2,731	52	5
Sibley	108,296,913	12,572,251	1,449,997	210,564
South Harper	292,808	147,826	2,788	279

	Sulfur Dioxide (SO2) (TONS)	Annual Nitrogen Oxide (NOx) (TONS)	Summer Nitrogen Oxide (NOx) (TONS)
<i>KCP&L Greater Missouri Operations Company</i>	<i>33,224</i>	<i>0.0217</i>	<i>0.0209</i>
Greenwood	0	0.0000	0.0000
Lake Road	4,800	0.0101	0.0094
Nevada	0	0.0000	0.0000
Ralph Green	0	0.0000	0.0000
Sibley	28,425	0.0116	0.0115
South Harper	0	0.0000	0.0000



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Identified Flue Gas Desulfurization (FGD) controls installed on plants operated by KCP&L Greater Missouri Operations Company

Plant	Control Equipment	Sorbent Type
	No FGD Controls Installed	

Identified Flue Gas Particulate (FGP) controls installed on plants operated by KCP&L Greater Missouri Operations Company

Plant	Control Equipment
Sibley	Electrostatic precipitator, cold side, without flue gas conditioning
Lake Road	Electrostatic precipitator, cold side, with flue gas conditioning
Lake Road	Electrostatic precipitator, cold side, without flue gas conditioning

Notes:

Generation, emissions and pollution control data include power plants owned by the utility and located in Missouri.

Emissions data calculated by Missouri Department of Natural Resources, Division of Energy, from EIA Fuel Consumption Data

Fuel Consumption and Generation Data from United States Energy Information Administration, Form 923, United States Department of Energy
<http://www.eia.gov/electricity/data/eia923>

Pollution control data (FGD and FGP equipment) from United States Energy Information Administration, Form 860, United States Department of Energy
<http://www.eia.gov/electricity/data/eia860/index.html>

Emissions factors for fuel-based generation from United States Environmental Protection Agency "Emission Factors for Greenhouse Gas Inventories", November 7, 2011,
<http://www.epa.gov/climateleadership/documents/emission-factors.pdf>